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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,869	10/09/2003	Jack Hou	07783.0071.NPUS01	7895

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EXAMINER	
THOMAS, JAISON P	
ART UNIT	**PAPER NUMBER**
1751	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/683,869	HOU ET AL.	
	Examiner	Art Unit	
	Jaison P. Thomas	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-83* is/are pending in the application.

4a) Of the above claim(s) *See Continuation Sheet* is/are withdrawn from consideration.

5)☐ Claim(s) *6-10,28,29,52, 53 and 77* is/are allowed.

6)☐ Claim(s) *1-5,14,16,19,20,30,31,33,36,37,45-51,54-56,58,61,62,70,71,75,76 and 78-83* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims withdrawn from consideration are 11-13,15,17,18,21-27,32,34,35,38-44,57,59,60,63-69 and 72-74.

DETAILED ACTION

1. This action is responsive to the amendment filed 10/10/2006.

2. Claims 1,30 and 55 are amended. Claims 75-83 are new.

3. Claims 11-13,15,17,18,21-27,32,34,35,38-44,57,59,60,63-69 and 72-74 remain withdrawn in response to restriction/election requirement.

4. The rejection of Claims 2, 10 and 28 under 35 USC 112, second paragraph are withdrawn in view of applicant's amendments and remarks.

5. The rejection of Claims 30 and 33 under 35 USC 102(b) as being anticipated by Mashlyakovskiy et al. are withdrawn in view of applicant's arguments.

6. Claims 1,2,14,16,19,20,30,31,33,36,37,55,56,58,61,62,70 and 71 stand rejected under the ground of nonstatutory obviousness-type double patenting over Claims 1,2,3,17,18,22,27,33,34,35,45,46,47,48,53,54 of copending Application Nos. 10/976152 and 10/976244.

7. Claims 6-10, 28, 29, 52 and 53 remain allowable over the prior art.

8. Claims 1-5,14,16,19,20,30,31,33,36,37,45-50,51,54-56,58,61,62,70 and 71 stand rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Chiang (US Patent 4,285,801).

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1,30 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "hard" in claims 1,30 and 55 is a relative term which renders the claim indefinite. The term "hard" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For purposes of examination, the term "hard" will be given its broadest reasonable interpretation.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 75,76,78-83 are rejected under 35 U.S.C. 102(b) as anticipated by Chiang (US Patent 4285801).

A discussion of Chiang can be found in the office action dated 6/15/2006. The examiner notes that Claims 78-83 contain product by process limitations via its dependency on Claims 30 and 55 which are not given patentable weight because where the examiner has found a substantially similar product as the in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show the same process of making, see *In re Brown*, 173

USPQ 685 and *In re Fessman*, 180 USPQ 324. Burden is on applicants to show product differences in product by process claims, see *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Best*, 195 USPQ 430 (CCPA 1977); *In re Brown*, 173 USPQ 685 (CCPA 1972).

With respect to Claims 75 and 76, the examiner respectfully submits that the prior art meets the claimed limitations. Specifically, the examiner construes the "protective colloid" limitation of Claim 75 as being equivalent to the surfactant/solvent mixture disclosed in the prior art wherein the examiner defines a colloid as being a suspension of particles in a solvent and the examiner construes the surfactant coated microparticle of Chiang as being equivalent to the "pigment-containing microparticles comprise a hard shell" limitation of Claim 1.

Allowable Subject Matter

13. Claim 77 is allowable over the prior art of record.

Specifically the prior art does not teach, suggest or motivate a method for improving the threshold voltage of an electrophoretic display via the preparation of an electrophoretic fluid containing five unique components i.e. solvent, pigment particles, a reactive monomer or oligomer, a protective colloid and a threshold promoter. The closest art of record, Chiang, only contains four unique components.

Response to Arguments

14. Applicant's arguments filed 10/10/2006 have been fully considered but they are not persuasive.

With respect to the rejections based on Chiang, Applicants argue that the reference does not teach a coating of the pigment particles of the claimed invention through a microencapsulation process.

The Examiner respectfully disagrees with the arguments above because any difference imparted by the product by process limitations (i.e. "hard shell formed from a protective colloid") introduced by the amendments to Claims 30 and 55 would have been obvious to one having ordinary skill in the art at the time the invention was made and is not given patentable weight because where the examiner has found a substantially similar product as the in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show the same process of making, see *In re Brown*, 173 USPQ 685 and *In re Fessman*, 180 USPQ 324. Burden is on applicants to show product differences in product by process claims, see *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Best*, 195 USPQ 430 (CCPA 1977); *In re Brown*, 173 USPQ 685 (CCPA 1972).

With respect to the amendment to Claim 1, the Examiner respectfully submits that the prior art still anticipates the amended claim. Amended claim 1 only requires a "hard shell formed from a protective colloid" and Chiang teaches pigments particles coated with fluorinated surfactant dispersed in solvent containing a charge control agent (see e.g. Example III, Column 5, lines 51-56). The examiner construes charge

surfactant/solvent mixture as being equivalent to a "protective colloid" of the amended claim and that the coating provided on the surface of Chiang's pigment particles is a result of contacting surfactant/control agent/solvent mixture with the pigment particles. Chiang's coated particle is construed by the examiner as being a "pigment-containing microparticle comprise a hard shell" as required by Claim 1, without further clarification of the meaning of "hard" in either the specification or the claim, and giving the claim its broadest reasonable interpretation as discussed in the 35 USC 112 rejection discussed above.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 8:30 am to 5:00 pm.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaison Thomas
Examiner
12/19/2006

JT

Mark Kopec
Primary Examiner